<u>CLAIMS</u>

What is claimed is:

1   1.   A mobile, uniprocessor computer system comprising:

2   a high-level baseband controller to operate a radio module in accordance

3   with a wireless communication protocol; and

4   a primary host processor coupled to the high-level baseband controller,

5   the processor having a first portion to process real-time events

6   received from the controller and associated with the wireless

7   communication protocol, and having a second portion to process non

8   real-time events.

1   2.   The computer system of claim 1, wherein the first portion of the processor

2   includes a non-symmetric processing core to run a first operating system, the

3   second portion of the processor to run a second operating system, and the

4   first and second portions of the processor to share a level-2 cache.

1   3.   The computer system of claim 1, wherein the first portion of the processor

2   includes a real-time event circuit to halt a non real-time process and to initiate

3   execution of a real-time event handler.

1   4.   The computer system of claim 3, wherein the first portion of the processor

2   further includes a timer to trigger the real-time event circuit to initiate the

3   execution of the real-time event handler.

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1 5. The computer system of claim 3, wherein the processor includes an

2   externally accessible event pin to trigger the real-time event circuit to initiate

3   the execution of the real-time event handler.

1 6. The computer system of claim 1, wherein the non real-time events are

2   associated with running a Windows operating system.

1 7. The computer system of claim 1, further comprising a radio module including

2   buffered input-output ports coupled to the high-level baseband controller, a

3   low-level baseband controller, and a transceiver to enable wireless

4   communication in accordance with the wireless communication protocol, the

5   module meeting Limited Modular Approval by the Federal Communications

6   Commission.

1 8. The computer system of claim 7, wherein the low-level baseband controller

2   includes a baseband portion associated with a link management protocol.

1 9. The computer system of claim 7, further comprising a flexible cable coupled

2   to the high-level baseband controller at a first end and coupled to the ports of

3   the radio module at a second end.

1   10.   The computer system of claim 9, further comprising a hinged lid into which

2   the radio module is affixed, the flexible cable extending through a hinge

3   between the radio module and the high-level baseband controller.

1   11.   The computer system of claim 1, further comprising a chipset, the high-level

2   baseband controller being incorporated into the chipset.

1   12.   The computer system of claim 1, further comprising a keyboard controller, the

2   high-level baseband controller being incorporated into the keyboard

3   controller.

1   13.   The computer system of claim 1, wherein the wireless communication

2   protocol is selected from a group consisting of Bluetooth, SWAP, and IEEE

3   802.11.

1   14.   A method comprising:

2   executing a process on a primary host processor of a computer system,

3   the process being associated with a non real-time operating system;

4   receiving a real-time event by a transceiver of the computer system from

5   an external device, the event associated with a wireless

6   communication protocol;

7   forwarding the event to the processor; and

8   processing the event in real-time such that the wireless communication

9   protocol is maintained and a high-level portion of baseband processing

10   associated with the wireless communication protocol is done by the

11   processor independent of the operating system.

1   15.   The method of claim 14, wherein a low-level portion of the baseband

2   processing associated with the wireless communication protocol is done by a

3   radio module independent of the processor.

1   16.   The method of claim 15, wherein the wireless communication protocol is a

2   Bluetooth protocol, and the low-level portion of the baseband processing is in

3   accordance with the Bluetooth link management protocol.

1   17.   The method of claim 14, wherein processing the event in real-time includes

2   halting the process, saving a processor state to a reserved memory space,

3   executing a real-time event handler, returning the processor state, and

4   continuing execution of the process.

1   18.   The method of claim 14, wherein processing the event in real-time includes

2   processing the event in a first portion of the processor under a first operating

3   system while continuing execution of the process in a second portion of the

4   processor under a second operating system.

1   19.   A mobile, uniprocessor computer system programmed to implement the

2   method of claim 14.

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1   20.   A machine-accessible medium including machine-accessible instructions

2   that, when executed by a computer system, cause the computer system to

3 .   perform the method of claim 14.

1   21.   The medium of claim 20, further comprising machine-accessible instructions

2   that, when executed by the computer system, cause the computer system to

3   further perform the method of claim 16.

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